

What is claimed is:

1. A method for transmitting and receiving wireless data comprising the steps of:

establishing a catalog of information related to an application data service;

5 adding header information by referring to the established catalog, and error detecting codes to application data; and

deciphering a header when data errors are detected by the error detecting codes added to the application data, and transmitting the application data to an upper ranking layer according to a quality of service if the
10 deciphered value of the header belongs to the determined catalog.

2. The method of claim 1, wherein the header information of each layer is added to the application data.

3. The method of claim 1, wherein deciphering the header occurs while receiving the data.

4. A method for transmitting wireless data comprising the steps of:

establishing a catalog of information related to an application data service;

5 establishing a payload, including the application data, and adding header information about the application data by referring to the established catalog; and

adding error detecting codes to the payload, and performing channel-coding.

5. A method for receiving wireless data in a wireless data system including a catalog of information related to an application data service, comprising the steps of:

determining data errors in each layer using error detecting codes added
5 to received data after channel-decoding the received data;

deciphering header information in each layer when data errors are detected;

transmitting data to an upper ranking layer according to the quality of service if the header information deciphered in each layer belongs to the
10 catalog; and

decoding the transmitted data.

6. The method of claim 1, wherein the error detecting codes are added in a physical layer.

7. The method of claim 2, wherein the error detecting codes are added in a physical layer.

8. The method of claim 3, wherein the error detecting codes are added in a physical layer.

9. The method of claim 4, wherein the error detecting codes are added in a physical layer.

10. The method of claim 1, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes data information related to RLP and MUX sub layers.

11. The method of claim 2, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes data information related to RLP and MUX sub layers.

12. The method of claim 3, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes data information related to RLP and MUX sub layers.

13. The method of claim 4, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes data information related to RLP and MUX sub layers.

14. The method of claim 5, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes data information related to RLP and MUX sub layers.

15. The method of claim 1, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes information related to the quality of service.

16. The method of claim 2, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes information related to the quality of service.

17. The method of claim 3, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes information related to the quality of service.

18. The method of claim 4, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes information related to the quality of service.

19. The method of claim 5, wherein the catalog is established during a previous transmission/reception of application data, said catalog includes information related to the quality of service.

20. The method of claim 15, wherein the information related to the quality of service is a delay time value of the transmitted data or an error generation probability value of the transmitted data.

21. The method of claim 16, wherein the information related to the quality of service is a delay time value of the transmitted data or an error generation probability value of the transmitted data.

22. The method of claim 17, wherein the information related to the quality of service is a delay time value of the transmitted data or an error generation probability value of the transmitted data.

23. The method of claim 18, wherein the information related to the quality of service is a delay time value of the transmitted data or an error generation probability value of the transmitted data.

24. The method of claim 19, wherein the information related to the quality of service is a delay time value of the transmitted data or an error generation probability value of the transmitted data.

25. The method of claim 1, further comprising a step of signaling null data to the upper ranking layer, if the header information deciphered in each layer does not exist in the catalog.

26. The method of claim 2, further comprising a step of signaling null data to the upper ranking layer, if the header information deciphered in each layer does not exist in the catalog.

27. The method of claim 3, further comprising a step of signaling null data to the upper ranking layer, if the header information deciphered in each layer does not exist in the catalog.

28. The method of claim 5, further comprising a step of signaling null data to the upper ranking layer, if the header information deciphered in each layer does not exist in the catalog.

29. The method of claim 1, further comprising a step of applying a predetermined standard of judgement according to a quality of service or a decoder of the application layer, when the data is transmitted to the upper ranking layer.

30. The method of claim 2, further comprising a step of applying a predetermined standard of judgement according to a quality of service or a decoder of the application layer, when the data is transmitted to the upper ranking layer.

31. The method of claim 3, further comprising a step of applying a predetermined standard of judgement according to a quality of service or a decoder of the application layer, when the data is transmitted to the upper ranking layer.

32. The method of claim 5, further comprising a step of applying a predetermined standard of judgement according to a quality of service or a decoder of the application layer, when the data is transmitted to the upper ranking layer.

33. The method of claim 29, wherein the predetermined standard of judgement is decided by referring to cyclic redundancy code (CRC) information calculated in a physical layer, header fields of each layer, and an initially established data service catalog.

34. The method of claim 30, wherein the predetermined standard of judgement is decided by referring to cyclic redundancy code (CRC) information calculated in a physical layer, header fields of each layer, and an initially established data service catalog.

35. The method of claim 31, wherein the predetermined standard of judgement is decided by referring to cyclic redundancy code (CRC) information calculated in a physical layer, header fields of each layer, and an initially established data service catalog.

36. The method of claim 29, wherein the predetermined standard of judgement is decided according to the possibility of an error correction determined in the header fields.

37. The method of claim 30, wherein the predetermined standard of judgement is decided according to the possibility of an error correction determined in the header fields.

38. The method of claim 31, wherein the predetermined standard of judgement is decided according to the possibility of an error correction determined in the header fields.

39. An apparatus for transmitting and/or receiving wireless data comprising:

transmitting means for establishing a catalog of information related to an application data service, adding header information of each protocol layer
5 by referring to a catalog , adding error detecting codes to the application data, and transmitting the application data, including the header information and the error detecting codes; and

receiving means for deciphering a header if data errors are detected by the error detecting codes of the application data received from the transmitting
10 means, and decoding the data according to a quality of service if the deciphered value belongs to the established catalog.